

(6) PARTNERSHIP WITH GOVERNMENT ENTITIES.—

(A) ESTABLISHMENT.—In establishing the Applied Research Open-RAN testbed, the Assistant Secretary shall—

(i) consult with the Federal Communications Commission, including with respect to ongoing work by the Commission to develop other testbeds, including private sector testbeds, related to Open-RAN technologies; and

(ii) ensure that the work on the testbed is coordinated with the responsibilities of the Assistant Secretary under any relevant memorandum of understanding with the Federal Communications Commission and the National Science Foundation related to spectrum.

(B) OPERATIONS.—In operating the Applied Research Open-RAN testbed, the Assistant Secretary shall, in consultation with the Federal Communications Commission, partner with—

(i) the First Responder Network Authority of the NTIA (also known as “FirstNet”) and the Public Safety Communications Research Division of the National Institute of Standards and Technology to examine use cases and applications for Open-RAN technologies in a public safety network;

(ii) other Federal agencies, as appropriate to examine use cases and applications for Open-RAN technologies in other areas of interest to such agencies; and

(iii) international partners, as appropriate.

(7) STAKEHOLDER INPUT.—The Assistant Secretary shall seek input from stakeholders regarding the establishment and operation of the Applied Research Open-RAN testbed.

(8) IMPLEMENTATION DEADLINE.—Not later than 180 days after the date of enactment of this Act, the Assistant Secretary shall—

(A) define metrics and parameters for the Applied Research Open-RAN testbed, including functionality, project configuration and capacity, performance, security requirements, and quality assurance;

(B) adopt any rules as necessary, in consultation with the Federal Communications Commission; and

(C) begin the development of the Applied Research Open-RAN testbed, including seeking stakeholder input as required by paragraph (7).

(9) REPORT.—Not later than 1 year after the date of enactment of this Act, the Assistant Secretary shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the findings of the testbed and any recommendations for additional legislative or regulatory actions relating to the work of the testbed.

(10) AUTHORIZATION OF APPROPRIATIONS.—

(A) IN GENERAL.—There are authorized to be appropriated for the administration of the Applied Research Open-RAN testbed \$20,000,000 for fiscal year 2022, to remain available until expended.

(B) RULE OF CONSTRUCTION.—Nothing in paragraph (6) shall be construed to obligate FirstNet or any other Federal entity to pay for the cost of the Applied Research Open-RAN testbed established under this subsection in the absence of the appropriation of amounts under this paragraph.

(C) AUTHORIZATION FOR VOLUNTARY SUPPORT.—A Federal entity, including FirstNet, may voluntarily enter into an agreement with NTIA to provide monetary or nonmonetary support for the Applied Research Open-RAN testbed.

(b) PARTICIPATION IN STANDARDS-SETTING BODIES.—

(1) DEFINITIONS.—In this subsection—

(A) the term “Assistant Secretary” means the Assistant Secretary of Commerce for Communications and Information;

(B) the term “eligible standards-setting body”—

(i) means a standards-setting body, participation in which may be funded by a grant awarded under paragraph (2), as determined by the Assistant Secretary; and

(ii) includes—

(I) the 3rd Generation Partnership Project (commonly known as “3GPP”);

(II) the Alliance for Telecommunications Industry Solutions (commonly known as “ATIS”);

(III) the International Telecommunications Union (commonly known as “ITU”);

(IV) the Institute for Electrical and Electronics Engineers (commonly known as “IEEE”);

(V) the World Radiocommunications Conferences (commonly known as the “WRC”) of the ITU;

(VI) the Internet Engineering Task Force (commonly known as the “IETF”);

(VII) the International Organization for Standardization (commonly known as the “ISO”) and the International Electrotechnical Commission (commonly known as the “IEC”);

(VIII) the O-RAN Alliance;

(IX) the Telecommunications Industry Association (commonly known as “TIA”); and

(X) any other standards-setting body identified under paragraph (4);

(C) the term “Secretary” means the Secretary of Commerce; and

(D) the term “standards-setting body” means an international body that develops the standards for open network architecture technologies.

(2) GRANT PROGRAM.—

(A) IN GENERAL.—The Secretary, in collaboration with the Assistant Secretary, shall award grants to private sector entities based in the United States to participate in eligible standards-setting bodies.

(B) PRIORITIZATION.—The Secretary shall prioritize grants awarded under this subsection to private sector entities that would not otherwise be able to participate in eligible standards-setting bodies without the grant.

(3) GRANT CRITERIA.—Not later than 180 days after the date on which amounts are appropriated under paragraph (5), the Secretary, in collaboration with the Assistant Secretary, shall establish criteria for the grants awarded under paragraph (2).

(4) CONSULTATION WITH FEDERAL COMMUNICATIONS COMMISSION.—The Secretary shall consult with the Federal Communications Commission in—

(A) determining criteria for the grants awarded under paragraph (2); and

(B) determining which standards-setting bodies, if any, in addition to the standards-setting bodies listed in paragraph (1)(B)(ii) are eligible standards-setting bodies.

(5) AUTHORIZATION OF APPROPRIATIONS.—

(A) IN GENERAL.—There are authorized to be appropriated for grants under paragraph (2) \$30,000,000 in total for fiscal years 2022 through 2025, to remain available until expended.

(B) ADMINISTRATIVE COSTS.—The Secretary may use not more than 2 percent of any funds appropriated under this paragraph for the administration of the grant program established under this subsection.

SA 2179. Mr. THUNE submitted an amendment intended to be proposed to amendment SA 2137 proposed by Mr. SCHUMER (for Ms. SINEMA (for herself, Mr. PORTMAN, Mr. MANCHIN, Mr. CASSIDY, Mrs. SHAHEEN, Ms. COLLINS, Mr.

TESTER, Ms. MURKOWSKI, Mr. WARNER, and Mr. ROMNEY)) to the bill H.R. 3684, to authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 2060, line 17, strike “NTIA AUTHORITY” and all that follows through “(E)” on page 2061, line 3.

SA 2180. Mr. BARRASSO (for himself and Mr. INHOFE) proposed an amendment to amendment SA 2137 proposed by Mr. SCHUMER (for Ms. SINEMA (for herself, Mr. PORTMAN, Mr. MANCHIN, Mr. CASSIDY, Mrs. SHAHEEN, Ms. COLLINS, Mr. TESTER, Ms. MURKOWSKI, Mr. WARNER, and Mr. ROMNEY)) to the bill H.R. 3684, to authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes; as follows:

In section 309(e) of the Energy Conservation and Production Act (as added by section 40511(a)), strike the closing quotation marks and the following period and insert the following:

“(f) LIMITATION ON USE OF FUNDS.—None of the funds made available under subsection (e) may be used—

“(1) to encourage or facilitate the adoption of building codes that restrict or prohibit the direct use of natural gas in residential and commercial buildings for space heating, water heating, cooking, or other purposes; or

“(2) to compel the adoption of model building energy codes.”.

SA 2181. Ms. LUMMIS (for herself, Mr. KELLY, and Mr. CORNYN) submitted an amendment intended to be proposed to amendment SA 2137 proposed by Mr. SCHUMER (for Ms. SINEMA (for herself, Mr. PORTMAN, Mr. MANCHIN, Mr. CASSIDY, Mrs. SHAHEEN, Ms. COLLINS, Mr. TESTER, Ms. MURKOWSKI, Mr. WARNER, and Mr. ROMNEY)) to the bill H.R. 3684, to authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes; as follows:

At the end of subtitle E of title I of division A, add the following:

SEC. 115. HIGHWAY COST ALLOCATION STUDY.

(a) IN GENERAL.—Not later than 4 years after the date of enactment of this Act, the Secretary, in coordination with State departments of transportation, shall carry out a highway cost allocation study to determine the direct costs of highway use by various types of users.

(b) INCLUSIONS.—The study under subsection (a) shall include an examination of—

(1) the Federal costs occasioned in the design, construction, rehabilitation, and maintenance of Federal-aid highways by—

(A) the use of vehicles of different dimensions, weights, number of axles, and other specifications; and

(B) the frequency of those vehicles in the traffic stream;

(2) the safety-, emissions-, congestion-, and noise-related costs of highway use by various types of users, and other costs as determined by the Secretary; and

(3) the proportionate share of the costs described in paragraph (1) that are attributable to each class of highway users.

(c) REQUIREMENTS.—In carrying out the study under subsection (a), the Secretary shall—

(1) ensure that the study examines only direct costs of highway use;

(2) capture the various driving conditions in different geographic areas of the United States;

(3) to the maximum extent practicable, distinguish between costs directly occasioned by a highway user class and costs occasioned by all highway user classes; and

(4) compare the costs occasioned by various highway user classes with the user fee revenue contributed to the Highway Trust Fund by those highway user classes.

(d) **REPORTS.**—

(1) **INTERIM REPORTS.**—Not less frequently than annually during the period during which the Secretary is carrying out the study under subsection (a), the Secretary shall submit to Congress an interim report on the progress of the study.

(2) **FINAL REPORT.**—On completion of the study under subsection (a), the Secretary shall submit to Congress a final report on the results of the study, including the recommendations under subsection (e).

(e) **RECOMMENDATIONS.**—On completion of the study under subsection (a), the Secretary, in coordination with the Secretary of the Treasury, shall develop recommendations for a set of revenue options to fully cover the costs occasioned by highway users, including recommendations for—

(1) changes to existing revenue streams; and

(2) new revenue streams based on user fees.

SA 2182. Mrs. GILLIBRAND (for herself, Mr. BOOKER, Mrs. FEINSTEIN, and Mr. BLUMENTHAL) submitted an amendment intended to be proposed to amendment SA 2137 proposed by Mr. SCHUMER (for Ms. SINEMA (for herself, Mr. PORTMAN, Mr. MANCHIN, Mr. CASSIDY, Mrs. SHAHEEN, Ms. COLLINS, Mr. TESTER, Ms. MURKOWSKI, Mr. WARNER, and Mr. ROMNEY)) to the bill H.R. 3684, to authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in division E, insert the following:

SEC. 50. MAXIMUM CONTAMINANT LEVELS.

Section 1412(b) of the Safe Drinking Water Act (42 U.S.C. 300g–1(b)) is amended by adding at the end the following:

“(16) **PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.**—

“(A) **REQUIRED REGULATIONS.**—Not later than 2 years after the date of enactment of this paragraph, the Administrator shall publish a maximum contaminant level and promulgate a national primary drinking water regulation for perfluoroalkyl and polyfluoroalkyl substances, including, at a minimum—

“(i) perfluorooctanoic acid (commonly referred to as ‘PFOA’); and

“(ii) perfluorooctane sulfonic acid (commonly referred to as ‘PFOS’).”

“(B) **MONITORING.**—In establishing monitoring requirements under the national primary drinking water regulation for perfluoroalkyl and polyfluoroalkyl substances under subparagraph (A), the Administrator shall—

“(i) consider options for tailoring monitoring requirements for public water systems that do not detect, or are reliably and consistently below the maximum contaminant level for, those substances; and

“(ii) prioritize the use of existing authorities to provide technical assistance and funding to help small, rural, or disadvantaged

public water systems to comply with the national primary drinking water regulation.

“(C) **HEALTH PROTECTION.**—The national primary drinking water regulation for perfluoroalkyl and polyfluoroalkyl substances under subparagraph (A) shall be protective of the health of subpopulations at greater risk, as described in section 1458.

“(D) **HEALTH RISK REDUCTION AND COST ANALYSIS.**—In meeting the requirements of paragraph (3)(C) with respect to the national primary drinking water regulation for perfluoroalkyl and polyfluoroalkyl substances under subparagraph (A), the Administrator may rely on information available to the Administrator with respect to 1 or more specific perfluoroalkyl or polyfluoroalkyl substances to extrapolate reasoned conclusions with respect to the health risks and effects of a class of perfluoroalkyl or polyfluoroalkyl substances of which the specific perfluoroalkyl or polyfluoroalkyl substances are a part, including by using techniques described in—

“(i) the document of the Environmental Protection Agency entitled ‘Generalized Read-Across (GenRA)’ (or a successor document); and

“(ii) the Toxicity Estimation Software Tool of the Environmental Protection Agency (or a successor tool).”

SA 2183. Mrs. GILLIBRAND (for herself, Ms. WARREN, Mr. PADILLA, Mr. DURBIN, and Mr. MARKEY) submitted an amendment intended to be proposed to amendment SA 2137 proposed by Mr. SCHUMER (for Ms. SINEMA (for herself, Mr. PORTMAN, Mr. MANCHIN, Mr. CASSIDY, Mrs. SHAHEEN, Ms. COLLINS, Mr. TESTER, Ms. MURKOWSKI, Mr. WARNER, and Mr. ROMNEY)) to the bill H.R. 3684, to authorize funds for Federal-aid highways, highway safety programs, and transit programs, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in division E, insert the following:

SEC. 50. CLEAN WATER ACT EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS AND WATER QUALITY CRITERIA FOR PFAS.

(a) **DEADLINES.**—

(1) **WATER QUALITY CRITERIA.**—Not later than 2 years after the date of enactment of this section, the Administrator shall publish in the Federal Register human health water quality criteria for each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of such substances.

(2) **EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS FOR PRIORITY INDUSTRY CATEGORIES.**—As soon as practicable, but not later than 4 years after the date of enactment of this section, the Administrator shall publish in the Federal Register a final rule establishing, for each priority industry category, effluent limitations guidelines and standards, in accordance with the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), for the discharge (including a discharge into a publicly owned treatment works) of each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of such substances.

(b) **NOTIFICATION.**—The Administrator shall notify the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate of each publication made under this section.

(c) **IMPLEMENTATION ASSISTANCE FOR PUBLICLY OWNED TREATMENT WORKS.**—

(1) **IN GENERAL.**—The Administrator shall award grants to owners and operators of pub-

licly owned treatment works, to be used to implement effluent limitations guidelines and standards developed by the Administrator for a perfluoroalkyl substance, polyfluoroalkyl substance, or class of such substances.

(2) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Administrator to carry out this subsection \$200,000,000 for each of fiscal years 2022 through 2026, to remain available until expended.

(d) **DEFINITIONS.**—In this section:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) **EFFLUENT LIMITATION.**—The term “effluent limitation” has the meaning given that term in section 502 of the Federal Water Pollution Control Act (33 U.S.C. 1362).

(3) **MEASURABLE.**—The term “measurable”, with respect to a chemical substance or class of chemical substances, means capable of being measured using—

(A) a test procedure promulgated or approved in accordance with part 136 of title 40, Code of Federal Regulations (or successor regulations); or

(B) another analytical method for measuring a perfluoroalkyl substance, polyfluoroalkyl substance, or class of those substances, if the analytical method is validated by the Administrator.

(4) **PERFLUOROALKYL SUBSTANCE.**—The term “perfluoroalkyl substance” means a chemical of which all of the carbon atoms are fully fluorinated carbon atoms.

(5) **POLYFLUOROALKYL SUBSTANCE.**—The term “polyfluoroalkyl substance” means a chemical containing at least one fully fluorinated carbon atom and at least one carbon atom that is not a fully fluorinated carbon atom.

(6) **PRIORITY INDUSTRY CATEGORY.**—The term “priority industry category” means the following point source categories:

(A) Organic chemicals, plastics, and synthetic fibers, as identified in part 414 of title 40, Code of Federal Regulations (or successor regulations).

(B) Pulp, paper, and paperboard, as identified in part 430 of title 40, Code of Federal Regulations (or successor regulations).

(C) Textile mills, as identified in part 410 of title 40, Code of Federal Regulations (or successor regulations).

(D) Electroplating, as identified in part 413 of title 40, Code of Federal Regulations (or successor regulations).

(E) Metal finishing, as identified in part 433 of title 40, Code of Federal Regulations (or successor regulations).

(F) Leather tanning and finishing, as identified in part 425 of title 40, Code of Federal Regulations (or successor regulations).

(G) Paint formulating, as identified in part 446 of title 40, Code of Federal Regulations (or successor regulations).

(H) Electrical and electronic components, as identified in part 469 of title 40, Code of Federal Regulations (or successor regulations).

(I) Plastics molding and forming, as identified in part 463 of title 40, Code of Federal Regulations (or successor regulations).

(7) **TREATMENT WORKS.**—The term “treatment works” has the meaning given that term in section 212 of the Federal Water Pollution Control Act (33 U.S.C. 1292).

(8) **WATER QUALITY CRITERIA.**—The term “water quality criteria” means the recommended criteria for water quality developed by the Administrator under section 304(a)(1) of the Federal Water Pollution Control Act (33 U.S.C. 1314(a)(1)).

SA 2184. Mrs. GILLIBRAND submitted an amendment intended to be